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***Studies in Applied Finance***

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**INVESTMENT THESIS FOR  
INTEL CORPORATION  
(NYSE: INTC)**

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***Vinitha Kumar***

Johns Hopkins Institute for Applied Economics,  
Global Health, and Study of Business Enterprise



## **Investment Thesis for Intel Corporation (NYSE: INTC)**

By Vinitha Kumar

**Disclaimer:** These research reports are primarily student reports for academic purposes and are not specific recommendations to buy or sell a stock. Potential investors should consult a qualified investment advisor before making any investment. This study was completed in May 2016.

### **About the Series**

The Studies in Applied Finance series is under the general direction of Prof. Steve H. Hanke, Co-Director of the Johns Hopkins Institute for Applied Economics, Global Health, and Study of Business Enterprise (hanke@jhu.edu) and Dr. Hesam Motlagh (hnekoor1@jhu.edu), a Fellow at the Johns Hopkins Institute for Applied Economics, Global Health, and Study of Business Enterprise. This working paper is one in a series on applied financial economics, which focuses on company valuations. The authors are mainly students at the Johns Hopkins University in Baltimore who have conducted their work at the Institute as undergraduate researchers.

### **About the Author**

Vinitha Kumar is a rising senior at Johns Hopkins University double majoring in Economics and Public Health Studies. She wrote this paper during her time as an undergraduate researcher for the Institute of Applied Economics, Global Health, and Study of Business Enterprise in the Spring of 2016. Vinitha will graduate in May 2017.

### **Abstract**

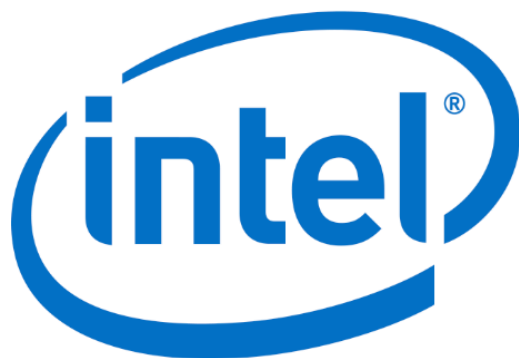
This working paper is an in-depth analysis of Intel Corporation. Our analysis examines on the factors that impact Intel's underlying business. This economic analysis is then combined with our proprietary, Hanke-Guttridge Discounted Cash Flow (HG-DCF) model to determine Intel's financial position. The HG-DCF model will be presented along-side Monte-Carlo simulations to reveal the distribution of probable free cash flows and the likelihood of future earnings. In addition to these quantitative factors, we also examine the compensation plans of Intel's executives to assess alignment with shareholders. At the conclusion of this analysis, it is our intention for readers to understand Intel's business plan and the company's financial standing to arrive at a sound investment decision.

### **Acknowledgments**

I thank Professor Steve Hanke, Dr. Hesam Motlagh, Ryan Guttridge, James Shin, whose original model was adapted for this thesis, and Abigail Biesman for guidance and draft comments.

**Keywords:** Financial Modelling, Intel Corporation, Discounted Cash Flow, Free Cash Flow, Monte-Carlo Simulation, Investment Thesis, Management Compensation

**JEL codes:** C63, G11



## Rating – Buy – Projected Free Cash Flow per Share: \$37.07

<b>Company Name:</b>	<b>Intel Corporation</b>
<b>Date:</b>	5/11/2016
<b>Current Price:</b>	\$30.06
<b>Fiscal Year End (Current Quarter):</b>	Dec. 26 (Q2)
<b>Diluted shares outstanding:</b>	4.875B <sup>1</sup>
<b>Market Cap:</b>	143.56B
<b>Dividend Yield:</b>	4.1458%
<b>Enterprise Value</b>	145,844.3M
<b>Beta:</b>	0.96 <sup>2</sup>
<b>52-week range:</b>	24.87-35.59
<b>2012 EPS</b>	2.13
<b>2013 EPS</b>	1.89
<b>2014 EPS</b>	2.31
<b>2015 EPS (ttm):</b>	2.33
<b>2015 P/E (ttm):</b>	12.79
<b>2016 EPS (P/E)</b>	2.4 (12.53x) <sup>3</sup>
<b>2017 EPS (P/E)</b>	2.58 (11.66x)
<b>2018 EPS (P/E)</b>	2.68 (11.23x)
<b>Price to Book</b>	2.28
<b>Price to Sales</b>	2.50

<sup>1</sup> "Intel Corporation 10-K." SEC. SEC, 2 Feb. 2016. Web. 15 May 2016.

<sup>2</sup> "Intel Corporation": *NASDAQ:INTC Quotes & News*. Google Finance, n.d. Web. 15 May 2016. <<https://www.google.com/finance?q=intc&ei=Odo4V5G2CMeBmAHDlZXyCw>>.

<sup>3</sup> Bloomberg Terminal, search <EE MULT> for INTC US Equity, 5/11/2016

## Contents

<b>Executive Summary:</b>	4
<b>Risks and Firm Specific Issues:</b>	4
<b>Company Overview:</b>	5
<i>2016 Overview:</i>	6
<i>2015 Overview:</i>	6
<i>2014 Overview:</i>	6
<i>Goodwill:</i>	6
<i>Long-term Asset Turnover and Useful Life:</i>	7
<i>Facilities:</i>	8
<i>Credit:</i>	8
<b>Model of Company:</b>	9
<b>Results and Discussion of Model:</b>	10
<i>Execution Risk:</i>	12
<i>Analysts' Recommendations:</i>	12
<b>Proxy Report:</b>	13
<i>Management Compensation:</i>	13
<i>Base Salary and Cash Bonuses:</i>	13
<i>Long-term Incentive Compensation:</i>	14
<i>Total Compensation:</i>	14
<i>Current Executive Committee:</i>	16
<i>Current Board of Directors and Relative Compensation:</i>	16
<i>Compensation Committee:</i>	16
<i>Companies in Technology Peer Group:</i>	16
<i>Companies in S&amp;P 100 Peer Group:</i>	17
<i>Dividend and Share History:</i>	17
<i>Multiples:</i>	19
<i>Insider Transaction Information:</i>	19
<b>Conclusion:</b>	20

\*Information in thesis is in tandem with accompanying spreadsheet and data

### Executive Summary:

Intel Corporation (NYSE: INTC) specializes in designing and manufacturing advanced integrated digital technology platforms. These platforms consist of a microprocessor and a chipset, as well as optional additional technology and services that could enhance the platform. INTC sells platforms to various manufacturers and industries, including original equipment manufacturers, original design manufacturers, and communications industries. INTC's platforms are used in notebooks, 2 in 1 systems, desktops, phones, servers, tablets, and retail devices<sup>4</sup>. The market currently prices INTC at \$30.06, which lies in the middle of its 52-week range (\$24.87-\$35.59). This price is lower than the probable free cash flow per share (\$37.07) determined through the Hanke-Guttridge Discounted Cash Flow (HG-DCF) model. Analyst's 12-month target price is \$35.52, which is also higher than the current market price.<sup>5</sup> My recommendation for INTC is to buy.

During 2015, INTC saw decreased earnings and compressed margins. The Company is now restructuring to closer match the needs of customers by shifting its concentration on personal computers (PC) to connected computing devices<sup>6</sup>. As such, we anticipate that INTC will see a mean reversion in their margins, asset turnover ratios, and revenues, which will free up cash flow to shareholders. As INTC restructures, the Company still believes the PC supply chain is healthy. When completing the HG-DCF, it is important to think of how the financial statements are connected. The HG-DCF incorporates both the balance sheet and income statement of a company, and our investment thesis centers on the expanding the balance sheet translating into growth that the market has not discounted. Their restructuring will be fueled by their recent acquisition of Altera, a semiconductor company, in Q1 of 2016. This acquisition is expected to help INTC drive Moore's Law and the growth in data centers and internet of things (IOT), which will also allow INTC to provide new classes of products to these market segments.

### Risks and Firm Specific Issues:

- Change in demand and macroeconomic environment
- High competition environment
- Defective products, errors in manufacturing
- IP risks
- Legal, regulatory, and litigation issues
- Cybersecurity issues<sup>7</sup>

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<sup>4</sup> "Intel Corporation 10-K." SEC. SEC, 2 Feb. 2016. Web. 15 May 2016.

<sup>5</sup> Bloomberg Terminal search <ANR> for INTC US Equity, 5/15/2016

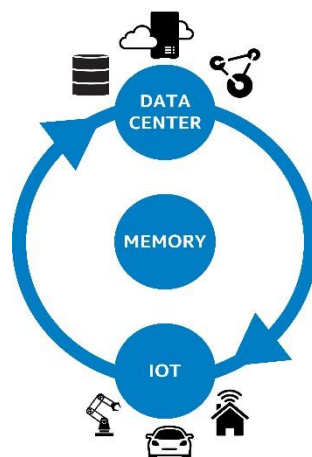
<sup>6</sup> Press release on Q1 2016 restructuring, <http://www.intc.com/investornews.cfm>.

<sup>7</sup> "Intel Corporation 10-K." SEC. SEC, 2 Feb. 2016. Web. 15 May 2016.

### Company Overview:

INTC was founded in 1968 in Santa Clara, California and went public in 1971.<sup>8</sup> INTC strives to offer complete and connected platforms, and to drive “Moore’s Law.” Moore’s Law is the idea that processor speeds and power will double every two years<sup>9</sup>. INTC is focused on the, “personalization of compute,” which refers to the phenomenon that computing is increasingly becoming personal and incorporated into most aspects of life. In order to develop the personalization of compute, INTC adheres to three assumptions: sensification of compute, smart and connected, and extension of you. INTC’s growth strategy is summarized by the virtuous cycle of growth, which is comprised of data centers, IOT, and memory. IOT and data centers go hand in hand: as the world grows more connected and “smart,” there will be increased demand for data and connectivity to devices. Memory will complement data centers and IOT, enabling systems to be faster and more efficient. Below is a visual representation of INTC’s growth strategy<sup>10</sup> (Figure 1). Furthermore, as mentioned previously, INTC recently announced plans to restructure their initiative to move away from a PC company to a company that focuses on clouds and smart, connected computing devices.<sup>11</sup>

#### Virtuous Cycle of Growth



**Figure 1:** Virtuous Cycle of Growth for INTC

Source: "Intel Corporation 10-K." SEC. SEC, 2 Feb. 2016. Web. 15 May 2016.

INTC splits its revenues into operating segments and geography. The operating segments consist of Client Computing Group (CCG), formerly PC Client Group and Mobile & Communications Group, Data Center Group (DCG), Internet of Things Group (IOTG), Software and Services, and other. CCG includes platforms for notebooks, 2 in 1 systems, desktops, tablets, phones, wireless

<sup>8</sup> "Intel Timeline: A History of Innovation." *Intel*. N.p., n.d. Web. 15 May 2016.

<<https://web.archive.org/web/20130103012023/http://www.intel.com/content/www/us/en/history/historic-timeline.html>>.

<sup>9</sup> "Moore's Law." Moore’s Law. N.p., n.d. Web. 15 May 2016. <<http://www.moorelaw.org/>>.

<sup>10</sup> "Intel Corporation 10-K." SEC. SEC, 2 Feb. 2016. Web. 15 May 2016.

<sup>11</sup> Press release on Q1 2016 restructuring, <http://www.intc.com/investornews.cfm>.

and wired connectivity products, and mobile communication components. DCG includes platforms for enterprise, cloud, communications infrastructure, and technical computing segments. IOTG includes platforms for the IOT, such as retail, transportation, and home use. Software and Services includes products that supply solutions, such as security. The other category for both revenues and expenses include the following: Non-Volatile Memory Solutions Groups (NSG), New Devices Group, restructuring and asset impairment charges, employee compensation, divested businesses, and acquisition-related costs<sup>12</sup>. The geographical segments consist of China (including Hong Kong), Singapore, United States, Taiwan, and other countries.

Given INTC's acquisitive behavior, we have outlined recent major transactions below to highlight their investments into future earnings.

#### ***2016 Overview:***

In Q1 of 2016, INTC completed the acquisition of Altera. As mentioned, Altera is a semiconductor company specializing in programmable semiconductors and logic devices, such as field-programmable gate arrays (FPGAs), as well as System-on-Chip (SoC) devices. In 2016, from Q1 results, net income for the year is annualized to be around \$55 billion. Q1 earnings were \$13,702 million, which is higher than 2015 Q1 earnings of \$12,781 million. The business appears to be cyclical, as earnings for 2015 were more than four times Q1 earnings. For consistency with the model, 2016 Q1 numbers were annualized by multiplying the amount by four. Using this metric, however, may not accurately represent INTC's future sales, and therefore the model's estimate for 2016 annualized revenue could be an underestimate.

#### ***2015 Overview:***

During 2015, INTC completed eight acquisitions, which aggregated to a cost of \$1.0 billion. Most of these acquisitions were financed with cash and accounted for in goodwill or other intangible assets. A significant acquisition in 2015 was the acquisition of Lantiq Semiconductor, which will complement INTC's cable home gateways into digital subscriber line (DSL) and fiber markets. The revenue generated from these business services fall under their client computing group. INTC also completed three divestitures transactions in 2015, generating \$153 million.

#### ***2014 Overview:***

During 2014, INTC completed eight acquisitions, for a total cost of \$963 million. The acquisition of Axxia Networking Business of Avago Technologies Limited, will complement INTC's mobile wireless base station business. The revenue generated from these business services fall under their data center group. INTC divested the assets of Intel Media to Verizon Communications Inc. in 2014 as well<sup>13</sup>.

#### ***Goodwill:***

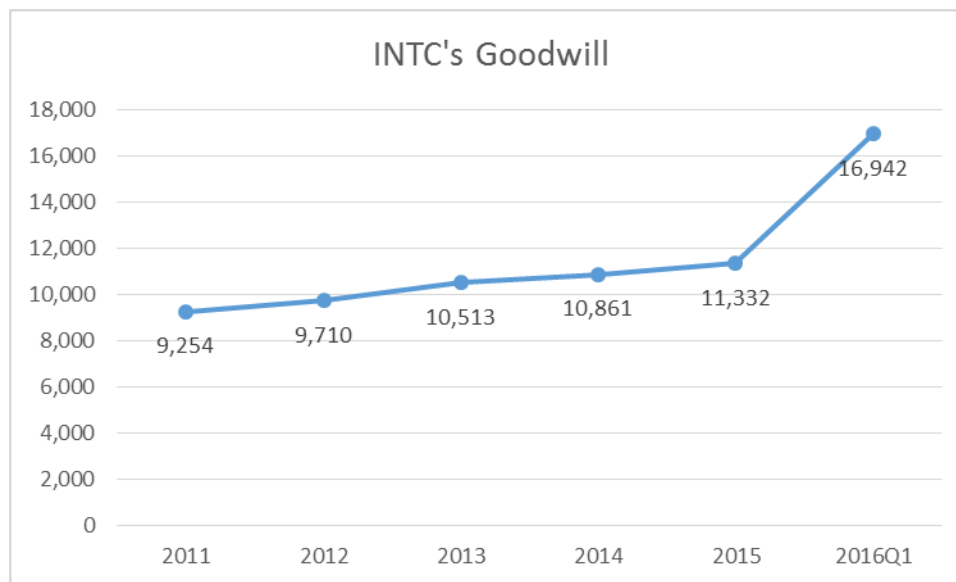
As a result of years of acquisitions, INTC has steadily grown its Goodwill. Below is a chart of their Goodwill since 2011 (Figure 2). Goodwill represents the excess in fair value of a business's assets that accounts for its intangible value and brand name value. It is important to monitor a company's impairment of Goodwill to assess whether or not it is pricing its acquisitions correctly.

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<sup>12</sup> "Intel Corporation 10-K." SEC. SEC, 2 Feb. 2016. Web. 15 May 2016.

<sup>13</sup> "Intel Corporation 10-K." SEC. SEC, 2 Feb. 2016. Web. 15 May 2016.

INTC combines its asset impairment with its restructuring charges. This amount has increased from 2013 to 2015, but this could be a result from their 2013 and 2015 restructuring programs.



**Figure 2:** INTC's Goodwill

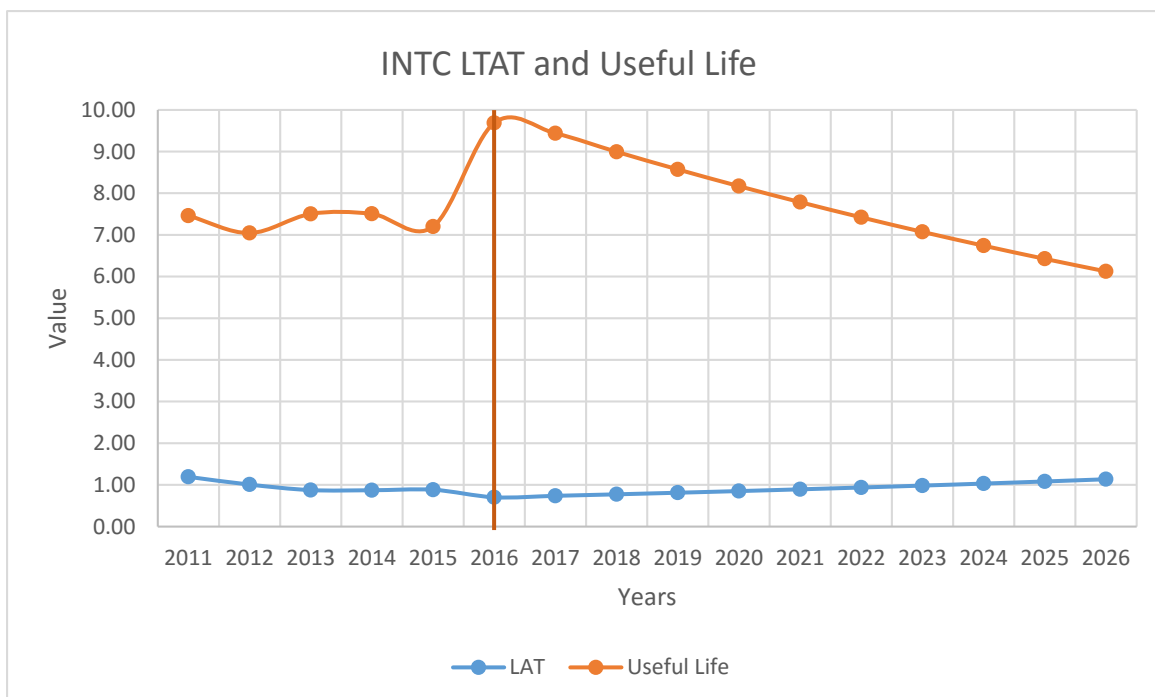
Source: "Intel Corporation 10-K." SEC. SEC, 2 Feb. 2016. Web. 15 May 2016.

Graph made by Vinitha Kumar

### *Long-term Asset Turnover and Useful Life:*

As previously explained, INTC's long-term asset turnover (LTAT) makes them a unique case to assess. LTAT shows how efficiently a company is utilizing their asset base to generate revenues. The following chart shows both their LTAT and useful life historically, and projected through the HG-DCF. Recently, INCT's LTAT has been decreasing. This is a result of their acquisitions and higher amounts of assets, while having similar revenues each year. However, the HG-DCF demonstrates that if there is a mean reversion of LTAT to historic levels (i.e. INTC is effective in integrating these assets), these acquisitions will increase future revenues over time (see past red line on figure below).





**Figure 3:** INTC's LTAT and Useful Life

Source: "Intel Corporation 10-K." SEC. SEC, 2 Feb. 2016. Web. 15 May 2016.

Graph made by Vinitha Kumar, projections after 2016 determined through HG-DCF

### Facilities:

While INTC leases a few of their facilities, it owns the majority of them, giving the Company significant intrinsic value. Table 1 highlights the facilities INTC owns versus what it leases and where.

(Square Ft in Millions)	United States	Other Countries	Total
<b>Owened facilities</b>	30.7	17.2	47.9
<b>Lease facilities</b>	2.1	6	8.1
<b>Total facilities</b>	32.8	23.2	56

**Table 1:** INTC's Facilities

Source: "Intel Corporation 10-K." SEC. SEC, 2 Feb. 2016. Web. 15 May 2016.

### Credit:

Table 2 below shows various companies' credit rating for INTC, demonstrating that INTC's debt is not distressed.

Company	Credit Rating
Morningstar	AA-
Moody's	Stable, A1 (for long term and senior unsecured debt)

Standard & Poor's	Stable, A+ (for long term debt)
Fitch	Stable, A+
Egan-Jones Rating Company	A+

**Table 2:** INTC's Credit

Sources:

"Intel Corp." INTC Debt, Bond, Rates, Credit. Morningstar, n.d. Web. 15 May 2016.

<<http://quicktake.morningstar.com/stocknet/bonds.aspx?symbol=intc>>.

Bloomberg Terminal, search &lt;CRPR&gt; for INTC US Equity, 5/15/2016

**Model of Company:**

The primary difficulty in modeling INTC was estimating its future growth revenue, as INTC's separate business segment revenues fluctuate significantly year to year and change often. Thus, it is difficult to estimate what the segment will generate in the future given the growth in certain segments and the secular headwinds faced in the PC markets. Historical averages and compounded annual growth rates were used to project future revenues. The final growth estimate used for the HG-DCF was the 10-year compounded annual growth rate from projecting segment data. Below is the table of historical averages and numbers used to project revenue by segment.

The final growth rate used for the HG-DCF was 4.95%. This growth rate relies on the assumption that there will be a mean reversion in revenues from all of INTC's recent acquisitions which we believe is realistic. For example, the acquisition of Altera is expected to drive growth in the Data Center Group and the IOT Group. As seen below, the growth rates used to project revenue in these segments are much higher than other segments.

Note: this growth rate may overestimate the revenue growth rate in the near future, and thus the future projected free cash flow per share. The model is very sensitive to assumed growth rates which we address with our Monte Carlo simulation in subsequent sections.

Segments	2011	2012	2013	2014	2015	2016 Q1A	Average	Assumed	CAGR	St Dev.
Client Computing Group (CCG)					32,219	30,196				
% growth						(6.28%)	-6.28%	-3.19%	-3.19%	0.00%
PC Client Group	35,624	34,688	33,270	34,669						
% growth		(2.63%)	(4.09%)	4.20%			-0.84%	0.00%	-0.68%	3.61%
Data Center Group	9,911	11,219	12,161	14,387	15,977	15,996				
% growth		13.20%	8.40%	18.30%	11.05%	0.12%	10.21%	10.21%	8.31%	6.00%
Internet of Things Group	-	1,600	1,801	2,142	2,298	2,604				
% growth			12.56%	18.93%	7.28%	13.32%	13.02%	13.02%	10.23%	4.13%
Mobile & Communications Group	-	1,791	1,375	202						
% growth			(23.23%)	(85.31%)			-54.27%	0.00%	51.68%	31.04%
Software and services	1,870	2,072	2,190	2,216	2,167	5,812				
% growth		10.80%	5.69%	1.19%	(2.21%)	168.20%	3.87%	12.34%	20.80%	65.88%
All other	6,594	1,971	1,911	2,254	2,694	200				

## Investment Thesis for Intel Corporation (NYSE: INTC) by Vinitha Kumar

% growth	(70.11%)	(3.04%)	17.95%	19.52%	(92.58%)	-25.65%	-25.65%	-	46.71%
Total net revenue	53,999	53,341	52,708	55,870	55,355	54,808			
% growth	(1.22%)	(1.19%)	6.00%	(.92%)	(.99%)		0.34%	0.34%	0.25%

**Table 3:** INTC Revenue Growth

Original calculated by James Shin, adapted and updated by Vinitha Kumar

Further, capital expenditures (CAPEX) was set to depreciation and amortization (D&A) levels. This assumes that INTC will replace its capital at the rate of its D&A levels. Although historically INTC has made strategic acquisitions, this assumption relies on INTC focusing on translating previous acquisitions into revenues, and reducing the rate at which it acquires companies. In 2015, INTC saw high levels of CAPEX (42.73%). However, keeping up this rate with acquisitions is unrealistic. The assumed rate used in the HG-DCF was 14.39%. This assumption is validated from its restructuring efforts to transform its company and its focus on the recent acquisition of Altera to help its movement.

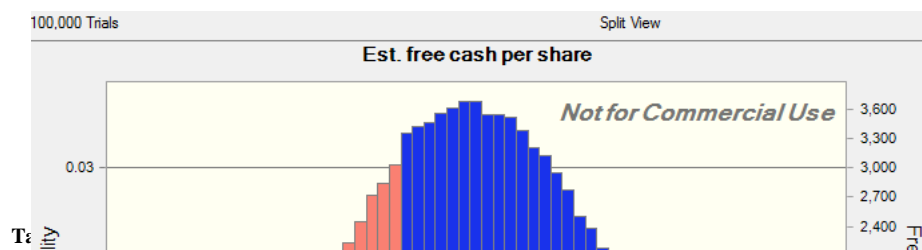
### Results and Discussion of Model:

The probable free cash flow per share determined through the HG-DCF was \$37.07, compared to a market price of \$30.06. In order to estimate this price, margins and revenue were projected using historical data. These projections and assumptions can be found in both the revenue growth tab and the Hanke-Guttridge Free Cash Flow (HG-FCF) page. Below is a summary of the HG-FCF, which shows the Company's various value drivers (Table 4).

The HG-FCF shows that INTC has stable margins, as all the standard deviations are low, with the exception of CAPEX. Stable margins indicate good management and consistency in management decisions.

Although historical LTAT has been decreasing, it is expected, through the HG-DCF, to begin increasing as more revenue is generated with the asset base reflecting management's ability to integrate these assets into the business. Although useful life is historically increasing, it is expected to decrease through the HG-DCF because the model assumes that D&A and CAPEX grow at the same rate so the asset base will stay the same.

A Monte-Carlo Simulation was performed to assess the projected free cash flow per share and its probable distribution. The current price falls between the 20<sup>th</sup> and 30<sup>th</sup> percentile of the simulation (see Figure 4 below). This indicates that we anticipate INTC's shares to be underpriced. With the probable free cash flow being \$37.07, 23.33% higher than its current price, and the current price falling to the left of the distribution, there appears to be an upside: this distribution supports the hypothesis that the market is not pricing INTC correctly to account for its future mean reversion and increased value.



Investment Thesis for Intel Corporation (NYSE: INTC) by Vinitha Kumar

Year	2011	2012	2013	2014	2015	2016	Average	Std. Dev.
Net revenue	53,999	53,341	52,708	55,870	55,355	54,808	54,347	1,214
% growth		(1.22%)	(1.19%)	6.00%	(.92%)	(.99%)	0.34%	2.83%
<b>Cost Structure (as % of net revenue)</b>								
Cost of goods sold, net D&A	26.26%	23.75%	24.96%	20.96%	21.62%	25.96%	23.92%	2.03%
R&D	15.46%	19.02%	20.13%	20.65%	21.91%	23.69%	20.14%	2.55%
Marketing, general & administrative	14.20%	15.10%	15.34%	14.56%	14.33%	16.25%	14.96%	0.70%
Restructuring & asset impairment charges	0.00%	0.00%	0.46%	0.53%	0.64%	0.00%	0.27%	0.28%
<b>EBITDA (as % of net revenue)</b>	<b>44.08%</b>	<b>42.12%</b>	<b>39.11%</b>	<b>43.30%</b>	<b>41.51%</b>	<b>34.10%</b>	40.70%	3.34%
Gains (losses) on equity investments, net (as % of net revenue)	0.21%	0.26%	0.89%	0.74%	0.57%	0.16%	0.47%	0.28%
Interest and other, net (as % of net revenue)	0.36%	0.18%	(0.29%)	0.08%	(0.19%)	(0.60%)	-0.08%	0.32%
<b>Income tax provision (as % of EBITDA)</b>	<b>20.33%</b>	<b>17.22%</b>	<b>14.51%</b>	<b>16.94%</b>	<b>12.15%</b>	<b>9.89%</b>	15.17%	3.45%
<b>Cash flow drivers (as % of net revenue)</b>								
Change in working capital		2.26%	5.43%	(6.59%)	0.40%	(4.69%)	-0.64%	4.43%
Capital expenditures		28.62%	29.05%	22.27%	13.10%	42.73%	27.16%	9.69%
D&A (as % of net revenue)	11.23%	14.10%	15.24%	15.30%	15.74%	14.71%	14.39%	1.50%

**Execution Risk:**

The Monte-Carlo distribution helps to assess the execution risk of investing in INTC. From the figure, there appears to be more upside than downside. There is, however, the risk that the assumptions in the HG-DCF are wrong. For example, INTC could acquire companies, as it did in 2015, and cash flow would not be freed for shareholders. Alternatively, the macroeconomic environment could worsen and revenue growth could either decline or plateau in addition to management failing to properly integrate these assets to generate meaningful revenue.

**Analysts' Recommendations:**

As stated before, Bloomberg reports that analysts have a target price of \$35.53 for INTC, giving a return potential of 18.8%. The following graphic reviews various analysts' recommendations on INTC (Figure 5). 56.8% of firms recommend a buy, 36.4% recommend a hold, and 6.8% recommend a sell. Therefore, there is not a general consensus on INTC being a buy, but most analysts predict INTC will either keep up with the market or outperform it.



**Figure 5: Analysts' Recommendations**

Source: Bloomberg Terminal. Search <ANR> for INTC US Equity, 5/15/2016

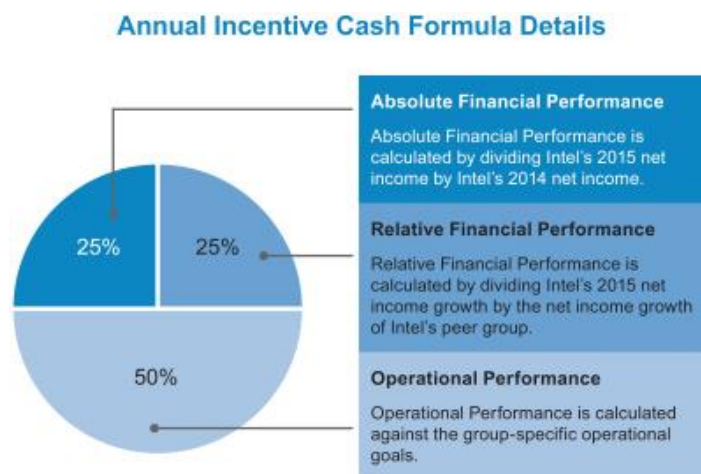
Given that our investment thesis is predicated on the mean-reversion of future asset turns, we opted to investigate management compensation and determine if executive incentives are aligned with our projections.

## Proxy Report:

### Management Compensation:

#### Base Salary and Cash Bonuses:

The total base salary of all 5 executives in 2015 was \$4,165,000. The main portion of cash payments are annual incentive payouts based on various measures of company performance. Due to lower financial earnings in 2015, incentive cash payouts were lower in 2015 than in 2014. Whereas in 2014 the payout was 122% of the target, the payout in 2015 was 94.3% of the target. Figure 6, below, details how annual cash incentive payments are calculated. The calculation includes inspecting changes in net income, net income growth, and group-specific goals. Also below are the amounts paid out in cash and the change from 2014 (Table 5). Most amounts declined from 2014 to 2015, which reflects that management was not paid when the Company underperformed.



**Figure 6:** Annual Incentive Cash Formula Details

Source: "Intel Corporation Schedule 14A." SEC. SEC, 4 Apr. 2016. Web. 15 May 2016.  
<http://www.sec.gov/Archives/edgar/data/50863/000119312516528154/d286791ddef14a.htm>.

Name	2015 Annual Cash Incentive (\$)	2014 Annual Cash Incentive (\$)	% Change 2015 vs. 2014
<b>Brian M. Krzanich</b>	3,301,700	3,221,400	2%
<b>Andy D. Bryant</b>	1,369,700	1,776,300	(23)%
<b>Stacy J. Smith</b>	1,698,000	1,581,800	7%
<b>William M. Holt</b>	1,013,000	1,179,500	(14)%
<b>Renee J. James</b>	1,918,100	2,487,200	(23)%

**Table 5:** Annual Cash Incentives 2014 and 2015

Source: "Intel Corporation Schedule 14A." SEC. SEC, 4 Apr. 2016. Web. 15 May 2016.  
<http://www.sec.gov/Archives/edgar/data/50863/000119312516528154/d286791ddef14a.htm>.

### Long-term Incentive Compensation:

Equity awards consisting of restricted stock units and outperformance restricted stock units are given based on company performance, notably absolute and relative total shareholder return (TSR). In 2015, TSR was 9.3%, which was above INTC's peer group. Total payout in equity awards was 158% of target. TSR is used as the financial criteria so that the executive committee can align their interests with that of shareholders. Further, every executive must hold stock in INTC. The table below details the specific equity ownership requirements.

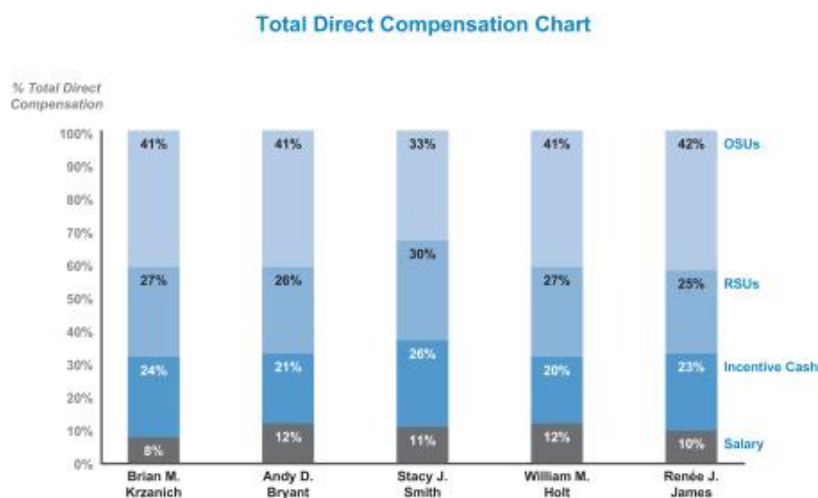
Title	Minimum Number of Shares
CEO	250,000
Executive Chairman & President	150,000
CFO	125,000
Executive Vice President	100,000
Senior Vice President	65,000
Corporate Vice President	35,000
Other VPs, Intel Fellows, and Senior Leaders	5,000 to 10,000

**Table 6:** Minimum Equity

Source: "Intel Corporation Schedule 14A." SEC. SEC, 4 Apr. 2016. Web. 15 May 2016.

<http://www.sec.gov/Archives/edgar/data/50863/000119312516528154/d286791ddef14a.htm>.

Figure 7, below, demonstrates how annual compensation was allocated for 2015, and a summary compensation table flows.



**Figure 7:** Compensation Chart

Source: "Intel Corporation Schedule 14A." SEC. SEC, 4 Apr. 2016. Web. 15 May 2016.

<http://www.sec.gov/Archives/edgar/data/50863/000119312516528154/d286791ddef14a.htm>

# Investment Thesis for Intel Corporation (NYSE: INTC) by Vinitha Kumar

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$)
Brian M. Krzanich Chief Executive Officer	2015	1,100,000	—	9,799,000	—	3,454,700
	2014	1,000,000	500	6,658,700	—	3,354,400
	2013	887,500	—	5,273,300	1,310,500	1,866,600
Andy D. Bryant Chairman of the Board	2015	790,000	—	4,585,700	—	1,466,000
	2014	790,000	500	4,512,500	—	1,870,500
	2013	760,000	—	3,451,000	894,500	1,222,400
Stacy J. Smith Executive Vice President and Chief Financial Officer	2015	775,000	—	4,388,900	—	1,790,800
	2014	673,000	500	4,338,900	—	1,663,400
	2013	650,000	—	3,711,000	894,500	1,093,100
William M. Holt <sup>1</sup> Executive Vice President, General Manager, Technology & Manufacturing Group	2015	650,000	—	3,675,000	—	1,081,400
	2014	641,000	500	4,338,900	—	1,252,800
Renée J. James <sup>2</sup> Former President	2015	850,000	—	5,752,300	—	2,021,600
	2014	850,000	500	5,660,200	—	2,600,400
	2013	775,000	—	4,511,800	1,107,700	1,492,400

Name and Principal Position	Year	Change in Pension Value and Non-Qualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Brian M. Krzanich Chief Executive Officer	2015	—	279,800	14,633,500
	2014	22,000	161,800	11,197,400
	2013	—	215,700	9,553,600
Andy D. Bryant Chairman of the Board	2015	—	132,800	6,964,500
	2014	267,000	102,000	7,542,500
	2013	—	108,000	6,435,900
Stacy J. Smith Executive Vice President and Chief Financial Officer	2015	—	139,600	7,094,300
	2014	183,000	106,300	6,965,100
	2013	—	111,000	6,469,600
William M. Holt <sup>1</sup> Executive Vice President, General Manager, Technology & Manufacturing Group	2015	25,000	95,000	5,526,400
	2014	288,000	78,700	6,599,900
Renée J. James <sup>2</sup> Former President	2015	—	184,200	8,808,100
	2014	74,000	181,900	9,367,000
	2013	—	142,800	8,029,700

**Table 7:** Compensation Summary

Source: "Intel Corporation Schedule 14A." SEC. SEC, 4 Apr. 2016. Web. 15 May 2016.

<<http://www.sec.gov/Archives/edgar/data/50863/000119312516528154/d286791ddef14a.htm>>.



*Current Executive Committee:*

Name	Age	Position
Brian M. Krzanich	56	Chief Executive Officer
Andy D. Bryant	64	Chairman of the Board
Stacy J. Smith	52	Executive Vice President and Chief Financial Officer
William M. Holt	62	Executive Vice President, General, Manager, Technology, & Manufacturing Group
Renee J. James	51	Former President

**Table 8:** Current Executive Committee

Source: "Intel Corporation Schedule 14A." SEC. SEC, 4 Apr. 2016. Web. 15 May 2016.

<<http://www.sec.gov/Archives/edgar/data/50863/000119312516528154/d286791ddef14a.htm>>.

*Current Board of Directors and Relative Compensation:*

Charlene Barshefsky	\$313,700
Aneel Bhursi	\$213,700
Susan L. Decker	\$378,700
John J. Donahue	\$261,000
Reed E. Hundt	\$316,200
James D. Plummer	\$326,200
David S. Pottruck	\$333,700
Frank D. Yeary	\$331,200
David B. Yoffie	\$343,400

**Table 9:** Current Board of Directors and Compensation

Source: "Intel Corporation Schedule 14A." SEC. SEC, 4 Apr. 2016. Web. 15 May 2016.

<<http://www.sec.gov/Archives/edgar/data/50863/000119312516528154/d286791ddef14a.htm>>.

John J. Donahue

David S. Pottruck (Chair)

David B. Yoffie

**Table 10:** Compensation Committee

Source: "Intel Corporation Schedule 14A." SEC. SEC, 4 Apr. 2016. Web. 15 May 2016.

<<http://www.sec.gov/Archives/edgar/data/50863/000119312516528154/d286791ddef14a.htm>>.

\*Note: there is no overlap between the compensation committee and the executive committee.

*Companies in Technology Peer Group<sup>14</sup>:*

Amazon.com

Apple Inc.

Applied Materials, Inc.

Cisco Systems, Inc.

eBay Inc.

EMC Corporation

<sup>14</sup> "Intel Corporation Schedule 14A." SEC. SEC, 4 Apr. 2016. Web. 15 May 2016.

<<http://www.sec.gov/Archives/edgar/data/50863/000119312516528154/d286791ddef14a.htm>>.

## Investment Thesis for Intel Corporation (NYSE: INTC) by Vinitha Kumar

Google Inc.  
HP Inc.  
International Business Machines Corporation  
Microsoft Corporation  
Oracle Corporation  
Qualcomm Inc.  
Texas Instruments Inc  
TSMC Ltd  
Western Digital Corporation

### *Companies in S&P 100 Peer Group:*

AT&T Inc.  
The Dow Chemical Company

General Electric Company  
Johnson & Johnson  
Merck & Co., Inc.  
Pfizer Inc.  
Schlumberger Limited  
United Parcel Service, Inc.  
United Technologies Corporation  
Verizon Communications Inc.

INTC lies within the 53<sup>rd</sup> percentile with revenues, 73<sup>rd</sup> percentiled with net income, and the 57<sup>th</sup> percentile with market capitalization.

### *Dividend and Share History:*

INTC currently has 4,875 million diluted shares outstanding. This amount has steadily decreased since 2011, as the Company has an ongoing share repurchase plan in place. In 2005, the Board of Directors authorized repurchase of shares up to \$65 billion. At the end of 2015, \$9.4 billion remained in the program for repurchase of shares<sup>15</sup>. The total number of shares repurchased during 2015 was \$95.7 million, which was a total of 16 million shares. Below is a chart depicting the decrease in number of shares outstanding over the past five years. The share repurchase explains why EPS increased, as net income decreased, from 2014 to 2015.

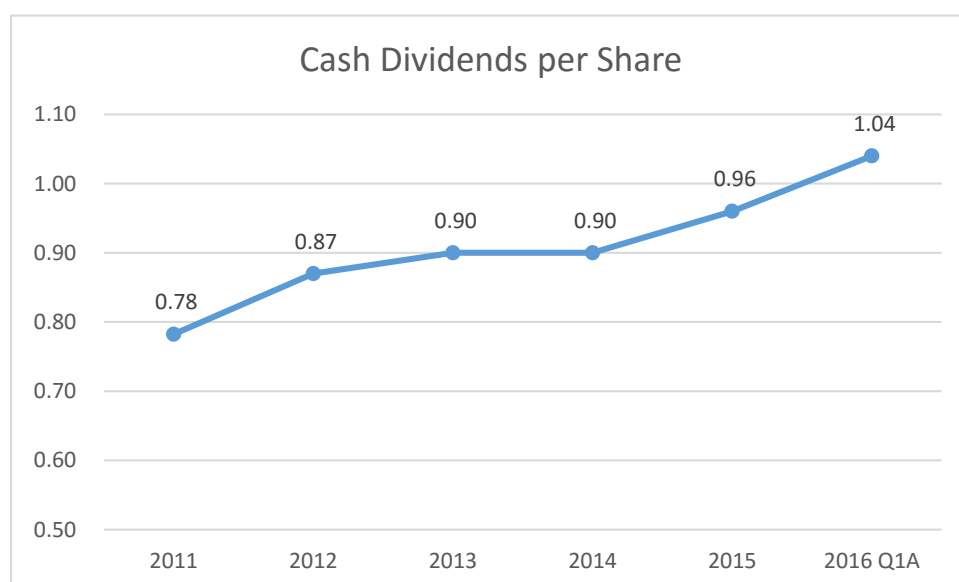


Figure 8: INTC Current Shares Outstanding

Source: Bloomberg Terminal, search <GP>, define Current Shares Outstanding as field, for INTC US Equity, 5/15/2016

INTC has historically paid dividends, and the dividends have been increasing in value. The following shows the dividend yield of INTC over the past five years. The dividend yield is currently 4.1458%. The amount paid in cash has also increased over time. In 2016, INTC declared that it would pay a quarterly dividend of \$0.26.





**Figure 10:** INTC Cash Dividends per Share  
Created by Vinitha Kumar

### ***Multiples:***

INTC's current P/E is 12.79. Multiplying this by its EPS of 2.33 yields a stock price of \$29.8, which is near the current stock price. This P/E implies that an investor would be willing to pay \$12.79 per \$1 of earnings from INTC. INTC's current price to book ratio is 2.2726, which is on the lower end of its historical values.

### ***Insider Transaction Information:***

The top two holders of INTC are Vanguard Group and BlackRock. The top ten holders of INTC hold 30.64% of shares outstanding. Investment advisors hold 88.76% of shares, pension funds hold 3.17%, and banks hold 2.18%. Insiders only hold .04% of shares. The screenshot below from Bloomberg reviews these statistics.

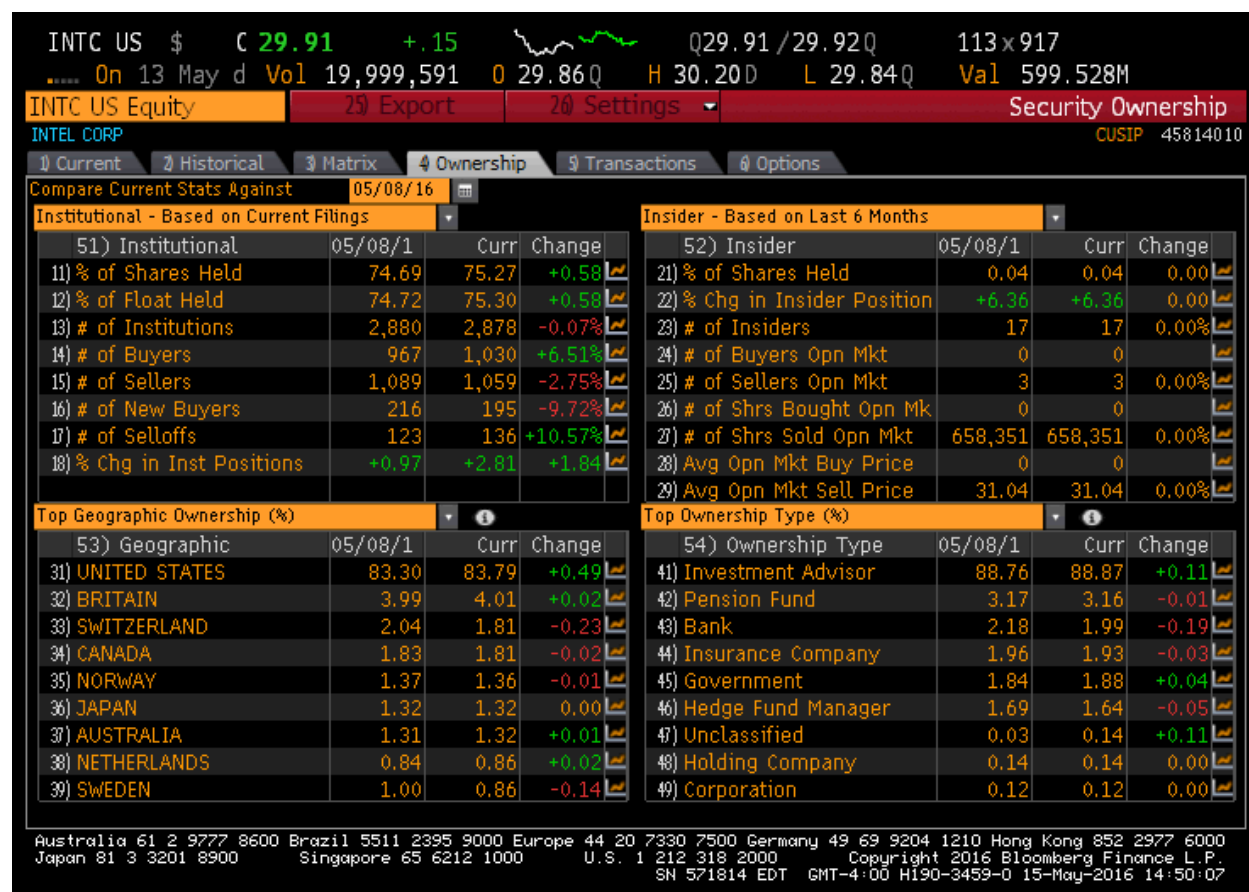


Figure 10: INTC Ownership

Source: Bloomberg Terminal, search &lt;OWN&gt;, for INTC US Equity, 5/15/2016

## Conclusion:

Although 2015's results were not as strong as 2014's, INTC continues to make sound management decisions and adapt to customers' needs. The market currently prices INTC at \$30.06, which is lower than the probable free cash flow per share of \$37.07 determined through our HG-DCF. The HG-DCF relies on the assumption that there will be a mean reversion in revenues, asset turnover ratios, and margins. This assumption makes sense as INTC has historically made strategic acquisitions, but is now focusing on restricting their company and utilizing their recent acquisitions to complement their various business segments. In order for this to happen, CAPEX must be sustained at lower levels, and revenue growth rates must increase as the acquired assets begin to generate revenue. The Monte-Carlo simulation shows that the current stock price is between the 20<sup>th</sup> and 30<sup>th</sup> percentile, indicating that there is more upside than downside with investing in INTC based on our model. There are certain risks with relying on the HG-DCF for investment decisions, notably the assumptions used to predict the future free cash flow to shareholders. After analyzing INTC's management compensation, it is evident that executives are aligned with shareholders interest as they are required to hold equity and are compensated based on total shareholder return. There were no clear red flags when reading through INTC's management compensation and nothing stood out as inconsistent with our investment thesis. Assuming the revenue growth rates and CAPEX rates hold and management decisions stay sound, I recommend INTC as a buy.